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EXAMINER
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HUNTSINGER, PETER K

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/821,490		WINTER ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Peter K. Huntsinger		2625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 December 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-37, 39-41, 43-65, 68-93, 95, 113, 114, 117, 123-127 and 129-134 is/are pending in the application.
- 4a) Of the above claim(s) 38, 42, 66, 67, 94, 96-112, 115, 116, 118-122 and 128 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 21-37, 39-41, 43-65, 68-70, 72-93, 95, 113, 114, 117, 123-127 and 129-134 is/are rejected.
- 7) ☒ Claim(s) 71 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 12/3/07 have been fully considered but they are not persuasive.

The applicant argues on pages 2 and 3 of the response in essence that:

The applicant's specification explicitly or inherently discloses the limitation of claim 133.

- a. The applicant cites page 4, line 6 of the specification as supporting the limitation "automatically cause the digital print mechanism to generate at least one final print in response to the enhancement of the digitally stored image." This section provides that programming in the printer causes a final print to be generated with enhancements. This section does not disclose or suggest that the final print is generated **in response** to enhancing the image.

The applicant argues on page 5 of the response in essence that:

Yamaguchi '178 does not disclose a digital print mechanism that generates a combination proof sheet and order form that incorporates at least one of the plurality of images and the plurality of user designation areas.

- b. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231

USPQ 375 (Fed. Cir. 1986). Hicks '387 discloses a print mechanism (printer mechanism, col. 3, lines 37-45) that generates a combination proof sheet and order form that incorporates at least one of the plurality of images and the plurality of user designation areas (Fig. 2).

The applicant argues on pages 5 and 6 of the response in essence that:

Hicks '387 does not disclose that the same print mechanism generates both the combination proof sheet and order form and the final print sheets.

c. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Hicks '387 discloses a print mechanism (printer mechanism, col. 3, lines 37-45) that generates a combination proof sheet and order form (Fig. 2). Yamaguchi '178 discloses printing digital images and a printer with a scanner mechanism capable of scanning and printing photos (col. 8-9, lines 37-67, 1-10, digital photo printer contains scanner 20 and CCD 52). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize a printer capable of scanning and printing digital photos. The motivation for doing so would have been to combine the functions of a scanner and photo printer with those of a document printer and to increase image quality.

The applicant argues on pages 6 and 7 of the response in essence that:

There is no disclosure that any final prints are produced in response to the detection and interpretation of the data on the order form.

- d. Hicks '387 discloses that order entry (input of print and order form) initiates the final printing process by eliminating the necessity to visually correlate film, proofs, and order forms (col. 4, lines 41-50).

The applicant argues on page 7 of the response in essence that:

Hicks '387 does not disclose automatically generating the final print sheet in response to the detection of the user designation areas.

- e. Hicks '387 discloses that order forms may be automatically entered into the computer data base, and thereafter, the identifying data, the order data, and the composition data are supplied from the computer data base and are utilized to produce the final photographic prints (col. 4, lines 21-30). Further, Hicks '387 discloses this process allows automated order entry to initiate the final printing process (col. 4, lines 41-50). Because the final print generating process is automated through the system of Hicks '387, it can be considered automatic.

The applicant argues on page 8 of the response in essence that:

Hicks '387 does not disclose the digital print mechanism automatically generates the final print sheets in response to the detection and interpretation of, and in accordance with, the user designation areas completed by the user.

f. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Hicks '387 discloses program logic configured to cause a print mechanism to automatically generate (col. 4, lines 16-30, order forms may be automatically entered by entering through a read device) at least one final print sheet having a graphical representation of at least one of the images in response to the detection and interpretation of, and in accordance with the user designation areas completed by the user (col. 4, lines 27-35, producing photographic prints). Yamaguchi '178 discloses printing digital images and a printer with a scanner mechanism capable of scanning and printing photos (col. 8-9, lines 37-67, 1-10, digital photo printer contains scanner 20 and CCD 52).

The applicant argues on page 9 of the response in essence that:

Neither Hicks '387 nor Yamaguchi '178 teaches a combined scanner, photo printer, and document printer.

g. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the

rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Hicks '387 discloses a print mechanism (printer mechanism, col. 3, lines 37-45) capable of generating graphical representations of selected ones of the plurality of images and a plurality of user designation areas on a print medium (Fig. 2). Yamaguchi '178 discloses printing digital images and a printer with a scanner mechanism capable of scanning and printing photos (col. 8-9, lines 37-67, 1-10, digital photo printer contains scanner 20 and CCD 52). The printer of Yamaguchi '178 is digital and does not chemically develop photos. Therefore, there is no distinction between printing digital photos are printing digitally stored text.

The applicant argues on page 9 of the response in essence that:

It is uncertain whether the digital process of Yamaguchi '178 would have a higher image quality than the system of Hicks '387.

h. Yamaguchi '178 discloses a system for improving the quality of an image by adjusting gray balance (col. 1, lines 7-12). Regardless of which system produces higher quality images, utilizing the process of Yamaguchi '178 to the printer of Hicks '387 would improve the image quality of the system of Hicks '387.

The applicant argues on pages 20 and 21 of the response in essence that:

Bartz '807 does not teach automatic enhancing of an image performed responsive to detecting and interpreting completed user designation areas.

- i. Bartz '807 discloses exposure parameter data may be entered at a mark box location having a ghost character outline by tracing over those portions of the ghost character outline that form the desired character (col. 2, lines 2-5). An optical character reader read the exposure parameter data, records the data on a information storage media, and automatically generates control commands to the printer to control the transparency exposure (col. 2, lines 5-14).

The applicant argues on page 21 of the response in essence that:

The optical character reader of Bartz '807 is not part of the printer as required by claim 74.

- j. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Yamaguchi '178 discloses printing digital images and a printer with a scanner mechanism capable of scanning and printing photos (col. 8-9, lines 37-67, 1-10, digital photo printer contains scanner 20 and CCD 52).

The applicant argues on page 22 of the response in essence that:



There is no motivation to combining Bartz '807 with Hicks '387 and Yamaguchi '178.

k. At the time of the invention, it would have obvious to a person of ordinary skill in the art to include user designation enhancing areas on the proof sheet and order form of Hicks '387. The motivation for doing so would have been to allow the user to crop and choose the color of ordered prints.

The applicant argues on page 22 of the response in essence that:

The combination of Hicks '387 and Bartz '807 would produce an inoperative device.

l. In response to applicant's argument that the combination of Hicks '387 and Bartz '807 would produce an inoperative device, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

The applicant argues on page 26 of the response in essence that:

The mark boxes of Bartz '807 are not disposed along adjacent side edges of the image.

m. Bartz '807 discloses mark boxes 18 and 19 may be located anywhere and there location is arbitrary (mark box columns 18 and 19 of Fig. 1, col. 3, lines 12-15). Therefore, as shown in Fig. 1, mark box 18 or 19 could clearly be exchanged for mark box 16.

The applicant argues on page 26 of the response in essence that:

The mark boxes of Bartz '807 do not indicate two-dimensional cropping positions for the image.

n. Bartz '807 discloses the mark boxes may correspond to crop size (col. 3, lines 12-15). Crop size would specify a specific length and height and therefore would be two-dimensional.

The applicant argues on page 26 of the response in essence that:

Calhoun '409 does not disclose images that are prospectively indicative of any change to the photograph because they are printed photographs themselves.

o. Calhoun '409 discloses each graphical representation prospectively indicative of the effect of the enhancement (Fig. 2, col. 6, lines 1-33). Regardless of whether the graphical representation is a printed photograph, it is prospectively indicative of a subsequent printed photograph.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 133 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation "automatically cause the digital print mechanism to generate at least one final print in response to the enhancement of the digitally stored image" is not present in the original disclosure nor is similar language describing the act.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 21, 26-28, 30-32, 34-37, 41, 43-52, 54-57, 61, 62, 64, 65, 68, 70, 72, 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387, and further in view of Yamaguchi '178.

Referring to claim 21, Hicks '387 discloses a printer for enabling a user to select and print a plurality of images accessible by the printer, comprising:

a print mechanism (printer mechanism, col. 3, lines 37-45) configurable by program logic to generate a combination proof sheet and order form having graphical representations of selected ones of the plurality of images and a plurality of user designation areas (Fig. 2).

Hicks '387 also discloses a scanner mechanism configurable by program logic to detect and interpret at least one user-completed one of the user designation areas after the form has been inserted into the scanner mechanism (col. 4, lines 16-26, passing the combined print and order form through a suitable read device); and

program logic configured to cause a print mechanism to generate at least one final print sheet having a graphical representation of at least one of the images in accordance with the at least one detected and interpreted user-completed one of the user designation areas (col. 4, lines 27-35, producing photographic prints).

Hicks '387 does not disclose expressly printing digital stored images and a printer with a scanner mechanism.

Yamaguchi '178 discloses printing digital images and a printer with a scanner mechanism capable of scanning and printing photos (col. 8-9, lines 37-67, 1-10, digital photo printer contains scanner 20 and CCD 52).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize a printer capable of scanning and printing digital photos. The motivation for doing so would have been to combine the functions of a scanner and photo printer with those of a document printer and to increase image quality. Therefore

it would have been obvious to combine Yamaguchi '178 with Hicks '387 to obtain the invention as specified in claim 21.

Referring to claim 26, Hicks '387 discloses wherein the graphical representations of the selected ones of the plurality of images include thumbnail images (Fig. 2, images considered thumbnails because they are smaller versions of larger images).

Referring to claim 27, Hicks '387 discloses wherein one of the user designation areas is located on the combination proof sheet and order form adjacent to and is associated with a corresponding one of the thumbnail images (order form 26 of Fig. 2, col. 3, lines 29-36).

Referring to claim 28, Hicks '387 discloses wherein the user designation areas to be user-completed include locations markable by the user with a marking implement (col. 3, lines 58-62).

Referring to claim 30, Hicks '387 discloses wherein at least some of the markable locations comprise at least one of vertical slots between adjacent vertical bars and discrete bounded regions (Fig. 2, order form 26 shows discrete bounded regions).

Referring to claim 31, Hicks '387 discloses wherein the combination proof sheet and order form includes user readable printed indicia (Fig. 2).

Referring to claim 32, Hicks '387 discloses wherein the scanner mechanism is an optical scanner (col. 4, lines 16-26, passing the combined print and order form through a suitable read device).

Referring to claim 34, Yamaguchi '178 discloses wherein the scanner mechanism is selected from the group consisting of an electrical scanner and a mechanical scanner (col. 8-9, lines 37-67, 1-10, digital photo printer contains scanner 20 and CCD 52).

Referring to claim 35, Hicks '387 discloses wherein a particular one of the user designation areas is associated with a corresponding one of the images (col. 3, lines 9-20).

Referring to claim 36, Hicks '387 discloses wherein the particular one of the user designation areas is adjacent the graphical representation of the corresponding one of the images (order form 26 of Fig. 2, col. 3, lines 29-36).

Referring to claim 37, Hicks '387 discloses wherein a particular one of the user designation areas is associated with a corresponding plurality of the images (order form 26 of Fig. 2, col. 3, lines 29-36).

Referring to claim 41, Yamaguchi '178 discloses a memory configured to store the images (col. 9, lines 11-49, hard disk drive unit 75).

Referring to claim 43, Hicks '387 discloses a printer for enabling a user to select and print a plurality of images accessible by the printer, the printer comprising:

a print mechanism (printer mechanism, col. 3, lines 37-45) capable of generating graphical representations of selected ones of the plurality of images and a plurality of user designation areas on a print medium (Fig. 2).

Hicks '387 further discloses a scanner mechanism capable of detecting at least one user designation area on the print medium after it has been completed by a user

(col. 4, lines 16-26, passing the combined print and order form through a suitable read device);

program logic configured to cause the print mechanism to generate a combination proof sheet and order form that incorporates at least one of the plurality of images and the plurality of user designation areas (Fig. 2);

program logic configured to cause the scanner mechanism to scan the combination proof sheet and order form after at least one of the plurality of user designation areas has been completed by a user and the combination proof sheet and order form has been inserted into the scanner mechanism (col. 4, lines 16-26, passing the combined print and order form through a suitable read device);

program logic configured to interpret one or more of the user designation areas completed by the user and detected by the scanner mechanism; and program logic configured to cause a print mechanism to automatically generate (col. 4, lines 16-30, order forms may be automatically entered by entering through a read device) at least one final print sheet having a graphical representation of at least one of the images in response to the detection and interpretation of, and in accordance with the user designation areas completed by the user (col. 4, lines 27-35, producing photographic prints).

Hicks '387 does not disclose expressly printing digital stored images and a printer with a scanner mechanism.

Yamaguchi '178 discloses printing digital images and a printer with a scanner mechanism capable of scanning and printing photos (col. 8-9, lines 37-67, 1-10, digital photo printer contains scanner 20 and CCD 52).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize a printer capable of scanning and printing digital photos. The motivation for doing so would have been to combine the functions of a scanner and photo printer with those of a document printer and to increase image quality.

Therefore it would have been obvious to combine Yamaguchi '178 with Hicks '387 to obtain the invention as specified in claim 43.

Referring to claim 44, Yamaguchi '178 discloses a data transfer interface configurable to receive the plurality of images (col. 9, lines 11-49).

Referring to claim 45, Hicks '387 discloses a system for enabling a user to select and print a plurality of images, the system comprising:

a printer (printer mechanism, col. 3, lines 37-45) capable of generating graphical representations of selected ones of the plurality of images and a plurality of user designation areas on a print medium (Fig. 2).

Hicks '387 further discloses a scanner capable of detecting at least one user designation area on the print medium after it has been completed by a user (col. 4, lines 16-26, passing the combined print and order form through a suitable read device);

program logic configured to cause the printer to generate a combination proof sheet and order form that incorporates at least one of the plurality of images and the plurality of user designation areas (Fig. 2);



program logic configured to cause the scanner to scan the combination proof sheet and order form after at least one of the plurality of user designation areas has been completed by a user and the combination proof sheet and order form has been inserted into the scanner (col. 4, lines 16-26, passing the combined print and order form through a suitable read device);

program logic configured to interpret one or more of the user designation areas completed by the user and detected by the scanner; and program logic configured to cause a printer to generate at least one final print sheet having a graphical representation in accordance with the user designation areas completed by the user (col. 4, lines 27-35, producing photographic prints).

Hicks '387 does not disclose expressly printing digital stored images and a printer with a scanner.

Yamaguchi '178 discloses printing digital images and a printer with a scanner capable of scanning and printing photos (col. 8-9, lines 37-67, 1-10, digital photo printer contains scanner 20 and CCD 52).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize a printer capable of scanning and printing digital photos. The motivation for doing so would have been to combine the functions of a scanner and photo printer with those of a document printer and to increase image quality.

Therefore it would have been obvious to combine Yamaguchi '178 with Hicks '387 to obtain the invention as specified in claim 45.

Referring to claim 46, see the rejection of claim 21 above.

Referring to claim 47, see the rejection of claim 43 above.

Referring to claim 48, Hicks '387 discloses automatically detecting a re-insertion of the user-completed combination proof sheet and order form; and initiating the detecting and interpreting in response thereto (col. 4, lines 16-30, order forms may be automatically entered by entering through a read device).

Referring to claim 49, Hicks '387 discloses wherein the plurality of user designation areas includes at least one of an image selection user designation area and an image enhancement user designation area (col. 3-4, lines 58-68, 1-6, whether user marks package determines image selection).

Referring to claim 50, Hicks '387 discloses generating an identity marker on the combination proof sheet and order form, the identity marker uniquely associated with at least one of the graphically represented images (Group code and frame number 28 of Fig. 2, col. 3, lines 37-45); and scanning the identity marker using the printer so as to confirm that the at least one, of the graphically represented images is available to the printer, before printing the at least one final print (col. 4, lines 16-35) The group and frame number must be obtained for printing the photos and thus confirms that the image is available, otherwise printing would not be possible.

Referring to claim 51, Hicks '387 discloses wherein the scanning the identity marker comprises: comparing the identity marker to a code associated with the at least one of the graphically represented images (Group code and frame number 28 of Fig. 2, col. 3, lines 37-45). It is inherent that the group and frame number on the order sheet correspond to the group and frame number in the computer database.

Referring to claim 52, Hicks '387 discloses preventing the printing if the at least one of the graphically represented images is unavailable to the printer. It is inherent that the printer cannot print if there is no image data.

Referring to claim 54, see the rejection of claim 26 above.

Referring to claim 55, see the rejection of claim 28 above.

Referring to claim 56, see the rejection of claim 32 above.

Referring to claim 57, see the rejection of claim 28 above.

Referring to claim 61, Hicks '387 discloses wherein a particular one of the user designation areas is associated with a corresponding one of the images (col. 3, lines 9-20).

Referring to claim 62, Hicks '387 discloses wherein the particular one of the user designation areas is adjacent the graphical representation of the corresponding one of the images (order form 26 of Fig. 2, col. 3, lines 29-36).

Referring to claim 64, Hicks '387 discloses wherein a particular one of the user designation areas is markable for specifying at least one of an image selection, an image cropping, an image brightness, an image rotation, a color balance, a superimposed picture date, a print size, a print quantity, and a picture storage selection (col. 3-4, lines 58-68, 1-6, whether user marks package determines image selection).

Referring to claim 65, see the rejection of claim 35 above.

Referring to claim 68, see the rejection of claim 41 above.

Referring to claim 70, Hicks '387 discloses wherein the detecting and interpreting comprises: identifying the at least one of the images from the completed user designation areas (Fig. 2, col. 3, lines 29-36).

Referring to claim 72, see the rejection of claim 43 above.

Referring to claim 73, see the rejection of claim 43 above.

Referring to claim 113, Hicks '387 discloses at least one processor-readable medium having processor-executable instructions therein which, when executed by a processor, cause the processor to perform operations comprising:

controlling a print mechanism (printer mechanism, col. 3, lines 37-45) to generate a combination proof sheet and order form having graphical representations of a plurality of images accessible by the processor and a plurality of user designation areas (Fig. 2).

Hicks '387 also discloses controlling a scanner mechanism to scan the combination proof sheet and order form after completion by a user (col. 4, lines 16-26, passing the combined print and order form through a suitable read device);

detecting on the scanned proof sheet and order form at least one user-completed one of the user designation areas; and interpreting the at least one user-completed one of the user designation areas to identify at least one user-selected one of the images and at least one user-selected print characteristic associated with the at least one user-selected one of the images (col. 4, lines 27-35, producing photographic prints).

Hicks '387 does not disclose expressly printing digital stored images and a printer with a scanner mechanism.

Yamaguchi '178 discloses printing digital images and a printer with a scanner mechanism capable of scanning and printing photos (col. 8-9, lines 37-67, 1-10, digital photo printer contains scanner 20 and CCD 52).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize a printer capable of scanning and printing digital photos. The motivation for doing so would have been to combine the functions of a scanner and photo printer with those of a document printer and to increase image quality. Therefore it would have been obvious to combine Yamaguchi '178 with Hicks '387 to obtain the invention as specified in claim 113.

Referring to claim 114, Hicks '387 discloses the operations further comprising: controlling the print mechanism to generate at least one final print of the at least one user-selected one of the images in accordance with the at least one user-selected print characteristics images (col. 4, lines 27-35, producing photographic prints).

Referring to claim 123, see the rejection of claim 45 above.

Referring to claim 124, Hicks '387 discloses code that interprets the at least one user-completed one of the user designation areas to identify at least one user-selected print characteristic (col. 4, lines 16-26, passing the combined print and order form through a suitable read device); and code that controls the print mechanism to generate the at least one final print in accordance with the at least one user-selected print characteristic (col. 4, lines 27-35, producing photographic prints).

Referring to claim 125, see the rejection of claim 21 above.

Referring to claim 126, Hicks '387 discloses means for generating at least one final print of the at least one user-selected one of the images in accordance with the at least one user-selected print characteristic (col. 4, lines 27-35, producing photographic prints).

Referring to claim 129, see the rejection of claim 21 above.

Referring to claim 130, Hicks '387 discloses wherein the program logic configured to cause the digital print mechanism to generate at least one final print sheet is configured to cause the print mechanism to automatically generate the at least one final print sheet in response to the scanner mechanism detecting and interpreting the at least one user-completed one of the user designation areas (col. 4, lines 16-30, order forms may be automatically entered by entering through a read device).

Referring to claim 131, see the rejection of claim 130 above.

Referring to claim 134, see the rejection of claim 130 above.

6. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387 and Yamaguchi '178 as applied to claim 21 above, and further in view of Rubscha '771.

Referring to claim 22, Hicks '387 discloses the scanning the form with the scanning mechanism but does not disclose expressly inserting the form into an input/output tray of the printer.

Rubscha '771 discloses reinserting a form into an input/output tray of a printer (col. 1, lines 5-14, document sheet input and output trays in a document handler).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to provide an input/output tray for a printer. The motivation for doing so would have been to allow the user a more convenient method of accessing the tray. Therefore it would have been obvious to combine Rubscha '771 with Hicks '387 and Yamaguchi '178 to obtain the invention as specified in claim 22.

7. Claims 23 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387 and Yamaguchi '178 as applied to claim 21 above, and further in view of Hirayama '406.

Referring to claim 23, Hicks '387 discloses a printer, but does not disclose expressly a data transfer interface configurable to receive the images, the interface being a memory card reader or an I/O port.

Hirayama '406 discloses receiving digital image with an I/O port (col. 3, lines 4-16).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize and I/O port. The motivation for doing so would have been to receive images from a computer. Therefore it would have been obvious to combine Hirayama '406 with Hicks '387 and Yamaguchi '178 to obtain the invention as specified in claim 23.

Referring to claim 39, Yamaguchi '178 discloses wherein the images are received from at least one of a flash memory card, a floppy diskette, a direct data link

and a wireless data link (col. 9, lines 11-49, a direct data link is connected to the hard disk drive unit 75).

8. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387 and Yamaguchi '178 as applied to claim 21 above, and further in view of Brewington '629.

Referring to claim 24, Hicks '387 discloses a printer, but does not disclose expressly graphics of microscopic pixels.

Brewington '629 discloses printing utilizing microscopic pixels (col. 3, lines 29-55).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to print utilizing microscopic pixels. The motivation for doing so would have been to print high quality photos. Therefore it would have been obvious to combine Brewington '629 with Hicks '387 and Yamaguchi '178 to obtain the invention as specified in claim 24.

9. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387 and Yamaguchi '178 as applied to claim 21 above, and further in view of Hall '131.

Referring to claim 25, Hicks '387 discloses a print mechanism, but does not disclose wherein the print mechanism is selected from the group consisting of a laser print mechanism, an ink jet print mechanism, a dot matrix print mechanism, a dye sublimation print mechanism, and a thermal print mechanism.



Hall '131 discloses a laser print mechanism, an ink jet print mechanism, a dot matrix print mechanism, a dye sublimation print mechanism, and a thermal print mechanism (col. 1, lines 34-39).

At the time of the invention, it would have obvious to a person of ordinary skill in the art to utilize a laser, ink, dot matrix, dye sublimation, or thermal print mechanism. The motivation for doing so would have been to utilize a print mechanism best served for the type of printing needed (i.e. laser printing is more cost effective than other methods). Therefore, it would have been obvious to combine Hall '131 with Hicks '387 and Yamaguchi '178 to obtain the invention as specified in claim 25.

10. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387 and Yamaguchi '178 as applied to claim 28 above, and further in view of Yoshikawa '742.

Referring to claim 29, Hicks '387 discloses markable locations but does not disclose expressly bubble-shaped regions.

Yoshikawa '742 discloses bubble-shaped regions (Fig. 1). At the time of the invention, it would have obvious to a person of ordinary skill in the art to utilize bubble-shaped regions. The motivation for doing so would have been to utilize regions easy to mark with pen or pencil. Therefore it would have been obvious to combine Yoshikawa '742 with Hicks '387 to obtain the invention as specified in claim 29.

11. Claims 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387 and Yamaguchi '178 as applied to claim 32 above, and further in view of Meier '784.

Referring to claim 33, Hicks '387 discloses an optical scanner mechanism but does not disclose expressly wherein the optical scanner is selected from a group consisting of a photo detector array, a paper edge sensor, a media type sensor, and an ink jet pen activation energy sensor.

Meier '784 discloses a photo detector array, a paper edge sensor, a media type sensor, or an ink jet pen activation energy sensor (col. 2, lines 19-40, photo detector array).

At the time of the invention, it would have obvious to a person of ordinary skill in the art to utilize a photo detector array. The motivation for doing so would have been to utilize a high speed scanning method. Therefore it would have been obvious to combine Meier '784 with Hicks '387 to obtain the invention as specified in claim 33.

12. Claims 40, 59, 74-76, 79-82, 84-86, 89, 91, 93, 95, 117, 127, 132 and 133 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387 and Yamaguchi '178 as applied to claims 21, 47, 113, and 125 above, and further in view of Bartz '807.

Referring to claim 40, Hicks '387 discloses wherein the print mechanism is further configurable by stored program logic to generate a custom proof sheet and order form having at least one graphically represented image (order form 26 of Fig. 2, col. 3, lines 29-36).

Hicks '387 does not disclose expressly user designation cropping areas.

Bartz '807 discloses a custom proof sheet and order form having at least one graphically represented image and user designation cropping areas along adjacent side edges of the image, the user designation cropping areas markable by the user to graphically indicate two-dimensional cropping position for the image (mark box columns 18 and 19 of Fig. 1, col. 3, lines 12-15).

At the time of the invention, it would have obvious to a person of ordinary skill in the art to include user designation cropping areas on the proof sheet and order form of Hicks '387. The motivation for doing so would have been to allow the user to crop ordered prints. Therefore, it would have been obvious to combine Bartz '807 with Hicks '387 and Yamaguchi '178 to obtain the invention as specified in claim 40.

Referring to claim 59, Bartz '807 discloses generating with the printer at least one custom proof sheet and order form with user designation areas for enhancing a user-selected image (mark box columns 18 and 19 of Fig. 1, col. 3, lines 12-15).

Referring to claim 60, Bartz '807 discloses wherein the enhancing the user-selected image includes cropping the user-selected image (mark box columns 18 and 19 of Fig. 1, col. 3, lines 12-15).

Referring to claim 74, Hicks '387 discloses a method for printing an image available to a printer, comprising:

generating with the printer a form having at least one graphical representation of the image, and a plurality of user designation areas each associated with at least one of the graphical representations (Fig. 2, col. 3, lines 28-37);

scanning the form after a user has completed at least one of the user designation areas (col. 4, lines 16-26, passing the combined print and order form through a suitable read device);

detecting and interpreting the completed user designation areas; and printing, responsive to the detecting and interpreting, the image with the printer in accordance with the completed user designation areas (col. 4, lines 27-35, producing photographic prints).

Hicks '387 does not disclose expressly printing digital stored images and a printer with a scanner mechanism.

Yamaguchi '178 discloses printing digital images and a printer with a scanner mechanism capable of scanning and printing photos (col. 8-9, lines 37-67, 1-10, digital photo printer contains scanner 20 and CCD 52).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize a printer capable of scanning and printing digital photos. The motivation for doing so would have been to combine the functions of a scanner and photo printer with those of a document printer and to increase image quality.

Hicks '387 does not disclose expressly a user designation area associated with image enhancement.

Bartz '807 discloses a plurality of user designation areas each associated with at least one of the graphical representations and indicative of a particular image enhancement applicable to the image (mark box columns 18 and 19 of Fig. 1, col. 3, lines 12-15); and automatically enhancing, responsive to detecting and interpreting, the

image with the printer in accordance with the completed user designation areas (col. 1-2, lines 59-68, 1-14 generate commands to the printer to automatically control the exposure).

At the time of the invention, it would have obvious to a person of ordinary skill in the art to include user designation enhancing areas on the proof sheet and order form of Hicks '387. The motivation for doing so would have been to allow the user to crop and choose the color of ordered prints. Therefore it would have been obvious to combine Yamaguchi '178 and Bartz '807 with Hicks '387 to obtain the invention as specified in claim 74.

Referring to claim 75, see the rejection of claim 48 above.

Referring to claim 76, Hicks '387 discloses printing at least one final print of the image (col. 4, lines 27-35, producing photographic prints). Bartz '807 discloses enhancing the image (col. 3, lines 12-15).

Referring to claim 79, Hicks '387 discloses wherein the form has a single graphical representation of the image and a set of user designation areas associated with the graphical representation (Fig. 2). Bartz '807 discloses wherein the completed ones of the set of user designation areas collectively define the enhancement (col. 3, lines 12-15).

Referring to claim 80, Bartz '807 discloses wherein the enhancement is an image cropping selection (col. 3, lines 12-15).

Referring to claim 81, Hicks '387 discloses wherein the set of user designation areas comprises: a horizontal subset of user designation areas adjacent a horizontal edge of the graphical representation (Fig. 2).

Hicks '387 does not disclose expressly a vertical subset of user designation areas.

Bartz '807 disclose a vertical subset of user designation areas adjacent a vertical edge of the graphical representation (Fig. 1).

At the time of the invention, it would have obvious to a person of ordinary skill in the art to utilize a vertical set of user designation areas. The motivation for doing so would have been to place additional photo options for ordering prints. Therefore, it would have been obvious to combine Bartz '807 with Hicks '387 and Yamaguchi '178 to obtain the invention as specified in claim 81.

Referring to claim 82, Hicks '387 discloses wherein the image cropping selection is defined by the completion of two user designation areas in the vertical subset denoting a first cropping dimension and two user designation areas in the horizontal subset denoting a second cropping dimension (Fig. 1, col. 2-3, lines 67-68, 1-20). Bartz '807 discloses that mark box location is arbitrary.

Referring to claim 84, Bartz '807 discloses wherein a image has a print size, and wherein the print size is enlarged based on the first and second cropping dimensions (Fig. 1, col. 2-3, lines 67-68, 1-20, size and cropping dimensions are both included in Fig. 1 and selecting both options would enlarge a cropped image).

Referring to claim 85, see the rejection of claim 74 above.

Referring to claim 86, Hicks '387 discloses program logic configured to cause the print mechanism to generate at least one final print having a graphical representation of the image in accordance with the completed user designation areas (col. 4, lines 27-35, producing photographic prints).

Bartz '807 discloses enhancing the image in accordance with the completed user designation areas (mark box columns 18 and 19 of Fig. 1, col. 3, lines 12-15).

Referring to claim 89, see the rejection of claim 26 above.

Referring to claim 91, see the rejection of claim 31 above.

Referring to claim 93, see the rejection of claim 35 above.

Referring to claim 95, see the rejection of claim 41 above.

Referring to claim 117, Hicks '387 discloses the user-selected print characteristic but does not disclose expressly a user designation area associated with image enhancement.

Bartz '807 discloses enhancing at least one user-selected one of the images in accordance with at least one user-selected print characteristic (mark box columns 18 and 19 of Fig. 1, col. 3, lines 12-15).

At the time of the invention, it would have obvious to a person of ordinary skill in the art to include user designation enhancing areas on the proof sheet and order form of Hicks '387. The motivation for doing so would have been to allow the user to crop and choose the color of ordered prints. Therefore, it would have been obvious to combine Bartz '807 with Hicks '387 and Yamaguchi '178 to obtain the invention as specified in claim 117.

Referring to claim 127, see the rejection of claim 117 above.

Referring to claim 132, Bartz '807 discloses wherein the program logic configured to cause the processor to enhance the image is further configured to automatically cause the processor to enhance<sup>3</sup> the image in response to the detection and interpretation by the scanner mechanism (col. 1-2, lines 59-68, 1-14 generate commands to the printer to automatically control the exposure).

Referring to claim 133, Bartz '807 discloses wherein the program logic configured to cause the print mechanism to generate at least one final print is further configured to automatically cause the print mechanism to generate at least one final print in response to the enhancement of the image (col. 1-2, lines 59-68, 1-14 generate commands to the printer to automatically control the exposure).

13. Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387 and Yamaguchi '178 as applied to claim 47 above, and further in view of Eshoo '417.

Referring to claim 58, Hicks '387 discloses the user designation areas, but does not disclose expressly wherein the user designation areas comprise regions markable by a user by a process selected from the group consisting of punching out holes therein, applying a sticker thereto, and applying a conductive marker thereto.

Eshoo '417 discloses wherein the user designation areas comprise regions markable by a user by a process selected from the group consisting of punching out



holes therein, applying a sticker thereto, and applying a conductive marker thereto (col. 2, lines 5-29, label).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to mark a form with a sticker. The motivation for doing so would have been to utilize a method of marking a document that can be corrected/peeled off if needed. Therefore it would have been obvious to combine Eshoo '417 with Hicks '387 and Yamaguchi '178 to obtain the invention as specified in claim 58.

14. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387 and Yamaguchi '178, and further in view of Kobayashi '391.

Referring to claim 53, Hicks '387 discloses the identity marker, but does not disclose expressly wherein the identity marker comprises a pattern of printed and unprinted locations.

Yamaguchi '178 discloses wherein an identify marker comprises a pattern of printed and unprinted locations (col. 8, lines 37-52, barcode).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize a barcode as a marker. The motivation for doing so would have been to utilize a marker that is easily scanned. Therefore it would have been obvious to combine Yamaguchi '178 with Hicks '387 and Yamaguchi '178 to obtain the invention as specified in claim 53.

15. Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387 and Yamaguchi '178 as applied to claims 47 above, and further in view of Slater '481.

Referring to claim 63, Hicks '387 discloses user designation areas but does not disclose expressly one user designation area associated with a plurality of images.

Slater '481 discloses wherein a particular one of user designation areas is associated with a corresponding plurality of images (Fig. 2, col. 4, lines 1-17).

At the time of the invention, it would have obvious to a person of ordinary skill in the art to associate a user designation area with a plurality of images. The motivation for doing so would have been to allow the user to mark one area for all photos as opposed to one area for each photo. Therefore, it would have been obvious to combine Slater '481 with Hicks '387, and Yamaguchi '178 to obtain the invention as specified in claim 63.

16. Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387, and Yamaguchi '178 as applied to claim 47 above, and further in view of well known prior art.

Referring to claim 69, Hicks '387 discloses images but does not disclose expressly storing the images in a computer connected to the printer.

Official Notice is taken that it is well known and obvious to store digital pictures in a computer connected to a printer (see MPEP 2144.03). The motivation for doing so would have been to maintain images in a versatile stable environment (i.e. a server).

Therefore, it would have been obvious to combine well known prior art with Hicks '387, and Yamaguchi '178 to obtain the invention as specified in claim 69.

17. Claim 77 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387, Yamaguchi '178, and Bartz '807 as applied to claim 47 above, and further in view of Calhoun '409.

Referring to claim 69, Hicks '387 discloses wherein the form has a plurality of graphical representations of the image and at least one user designation area associated with each graphical representation (Fig. 2).

Hicks '387 does not disclose expressly each graphical representation prospectively indicative of the effect of the enhancement.

Calhoun '409 discloses each graphical representation prospectively indicative of the effect of the enhancement (Fig. 2, col. 6, lines 1-33).

At the time of the invention, it would have obvious to a person of ordinary skill in the art utilize a graphical representation prospectively indicative of an enhancement. The motivation for doing so would have been to allow the user to view the enhancement before determining which to select. Therefore, it would have been obvious to combine Calhoun '409 with Hicks '387, Yamaguchi '178, and Bartz '807 to obtain the invention as specified in claim 77.

18. Claim 78 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387, Yamaguchi '178, Bartz '807, and Calhoun '409 as applied to claim 77 above, and further in view of Kobayashi '391.

Referring to claim 78, Bartz '807 discloses the image enhancement but does not disclose expressly brightness selection or color balance selection.

Kobayashi '391 discloses wherein an enhancement is selected from the group consisting of a brightness selection and a color balance selection (Fig. 20B).

At the time of the invention, it would have obvious to a person of ordinary skill in the art to provide a brightness selection enhancement. The motivation for doing so would have been to allow the user to select a desired brightness in ordering prints. Therefore, it would have been obvious to combine Kobayashi '391 with Hicks '387, Yamaguchi '178, Bartz '807, Calhoun '409 to obtain the invention as specified in claim 78.

19. Claim 83 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387, Yamaguchi '178, and Bartz '807 as applied to claim 82 above, and further in view of Kuchta '777.

Referring to claim 83, Bartz '807 discloses wherein the image has a print size and cropping the image but does not disclose expressly wherein first and second cropping dimensions are adjusted to best-fit the image to a print size.

Kuchta '777 discloses wherein first and second cropping dimensions are adjusted to best-fit the image to a print size (col. 12, lines 51-62).

At the time of the invention, it would have obvious to a person of ordinary skill in the art to best-fit cropping dimensions. The motivation for doing so would have been to conform an image to available medium sizes. Therefore it would have been obvious to combine Kuchta '777 with Hicks '387, Yamaguchi '178, and Bartz '807 to obtain the invention as specified in claim 83.

20. Claim 87 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387, Yamaguchi '178, and Bartz '807 as applied to claim 85 above, and further in view of Hirayama '406.

Referring to claim 87, see the rejection of claim 23 above.

21. Claim 88 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387, Yamaguchi '178, and Bartz '807 as applied to claim 85 above, and further in view of Brewington '629.

Referring to claim 88, see the rejection of claim 24 above.

22. Claim 90 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387, Yamaguchi '178, and Bartz '807 as applied to claim 85 above, and further in view of Yoshikawa '742

Referring to claim 90, see the rejection of claim 29 above.

23. Claim 92 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hicks '387, Yamaguchi '178, and Bartz '807 as applied to claim 85 above, and further in view of Meier '784.

Referring to claim 92, see the rejection of claim 33 above.

***Allowable Subject Matter***

24. Claim 71 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

25. The following is a statement of reasons for the indication of allowable subject matter:

Referring to claim 71, Hicks '387 teaches a printer that generates a proof and order form having an image and user designation areas, scans the completed form, and prints a final print of the image.

The prior art does not teach a printer that responsive to scanning the completed form, prints an additional custom form having an image and user designation areas, scans the custom form, and produces the final print based on the proof and order form and the custom form.

***Conclusion***

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter K. Huntsinger whose telephone number is (571)272-7435. The examiner can normally be reached on Monday - Friday.

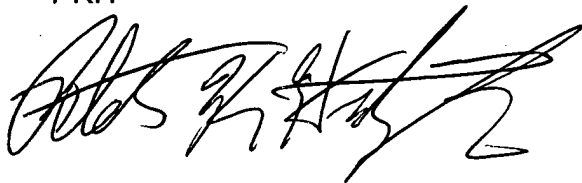
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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PKH

A handwritten signature in black ink, appearing to be 'PKH' with stylized flourishes.A handwritten signature in black ink, appearing to be 'David Moore'.

**DAVID MOORE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER**